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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/611,895	07/07/2000	Paul Szucs	450117- 02741	8156

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EXAMINER

PATEL, NITIN C

ART UNIT	PAPER NUMBER
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2185

DATE MAILED: 08/19/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/611,895

Applicant(s)

SZUCS ET AL.

Examiner

Nitin C. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed July21, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This is in responsive to amendments filed on July 21, 2003.
2. Claims 1 – 16 have been canceled.
3. Claims 17 – 35 added new.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 17 – 35 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yasuda et al. [hereinafter as Yasuda], US Patent 5,949,792 [cited in previous office action].
6. As to claims 17, Yasuda teaches the apparatus and method for recording/storing transport streams of data comprising the steps of:
 - a. receiving a first transport stream [audio stream] from a first reproducing device [audio reproducing device is inherent to audio transport stream] and receiving a second transport stream [video stream] from a second reproducing device [camera] substantially simultaneously with the reception of the first transport stream, wherein first and second devices are separate and independent from each other [col.7, lines 8 – 17, 65 – 67, col. 8, lines 1 – 61, col. 10, lines 36 - 51];
 - b. dividing each of the first and second transport streams into packets [packetizing units packetize the transport streams into packets, col. 5, lines 57 – 59, col. 9, lines 1 – 14, fig. 2, 3, and 7];

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- c. assigning a recording header [packet header] to each packet [col. 2, lines 61 – 67, fig. 2B];
 - d. generating a series of partial transport streams [GOP, group of pictures] from the recording headers and the packets [col. 7, lines 31 – 52, fig. 9];
 - e. combining the series of partial transport streams to form a combined transport [program stream]stream [col. 10, lines 3 – 33, fig. 9H, and 9I]; and
 - f. recording/storing the combined transport stream [col. 6, lines 17 – 34, col. 10, lines 25 – 50, col. 11, lines 29 – 61, fig. 5].
7. As to claim 18, Yasuda discloses that the combined transport stream [program stream] is recorded at a single recording medium [col. 6, lines 17 – 19].
8. As to claim 19, Yasuda discloses the receiving of transport streams from three or more separate and independent reproducing devices substantially simultaneously with each other [col. 7, lines 65 – 67, fig. 5].
9. As to claim 20, Yasuda discloses the use of predetermined clock [system clock reference] and/or to temporal relationships [timestamps, DTS and PTS] of the transport streams [col. 2, lines 31 – 49, col. 8, lines 1 - 36].
10. As to claim 22, Yasuda discloses use of system clock reference, which is inherently a constant frequency clock.
11. As to claim 24, Yasuda discloses a heading cycle start [entry point] indicating section for indicating the beginning of a new clock cycle and a new recorded/stored partial transport stream [fig. 3A, 3B, and 3C].

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12. As to claims 25, Yasuda teaches multiplexing of received transport streams, in particular from isochronous [independent] channels [col. 9, lines 13 – 15, col. 10, lines 25 – 50].

13. As to claims 26 – 27, Yasuda teaches multiplexing of transport streams from independent channels and use of presentation time stamp [PTS] and decoding time stamp [DTS][col. 2, lines 31 – 33, col. 7, lines 55 – 63, col. 10, lines 43 – 45].

14. As to claims 28, Yasuda discloses use of buffer to store the received transport stream [col. 7, lines 41 – 53, col. 8, lines 55 – 61, col. 9, lines 15 - 24].

15. As to claim 29, Yasuda teaches to receive video and/or audio data [fig. 5].

16. As to claim 30, Yasuda teaches MPEG1 and MPEG2, therefore he discloses the compressed or compactified format too [col. 2, lines 58 – 67].

17. As to claim 31, Yasuda teaches to store the received transport streams as series of partial streams to physical storage media device selected from one of a magnetic tape, optical, magnetic, or magneto-optical disc devices [col. 1, lines 14 – 17, fig.9H, 9I].

18. As to claims 31 – 34, Yasuda teaches method and apparatus for encoding a digital signal, recording medium used for digital signal, and method for transmitting digital signal including detecting size of access units [col. 6, lines 17 – 34], therefore, he discloses the detection of bandwidth available, and decision making steps for termination or proceed based on detection of available bandwidths too.

19. As to claim 35, Yasuda teaches a read-out device [10, fig. 1] therefore, he discloses the provision of playback mode for playing back previously recorded transport stream too [col. 3, lines 34 – 43].

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20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

22. Claims 21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yasuda et al. [hereinafter as Yasuda], US Patent 5,949,792 [cited in previous office action] as applied to claims 1 - 20, and 22 - 35 above, and further in view of Movshovich et al. [hereinafter as Movshovich], US Patent 6,438,145 B1 [cited in previous office action].

23. As to claim 21, Yasuda teaches the method and apparatus for storing a digital signal on a recording medium, which includes receiving plurality of streams, multiplexing of these streams over one transport stream to transmit the multiplexed transport stream for storing to reproduce the video/audio [col. 10, lines 25 - 50]. However, Yasuda does not teach to receive plurality of transport streams from a common digital bus system, in particular an i.LINK/IEEE 1394 based network bus and/or interface. In summary, Yasuda does not teach the use of i.LINK/IEEE 1394 bus to receive multiple transport streams.

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Movshovich teaches the transport packet distribution system and method using local header with peripheral bridge [218] interfaces, the system bus [202] to the peripheral I/O devices [220] for connectivity supported by the MPEG-2, which includes serial I/O [224], smart card interfaces [226], I2C interfaces [228], IEEE-1284 and IEEE-1394 interfaces [230, 232], codec interfaces [234] for modems, and infrared interfaces [236][col. 6, lines 47 – 60, fig. 2].

It would have been an obvious to one of an ordinary skill in art at the time of invention to combine the teachings of Yasuda and Movshovich because are related to the problems in multiplexing and de-multiplexing of transport streams and Movshovich's teaching's of distributing transport packets such as MPEG-2 by generating and associating a locally-generated header with each transport packets include a packet identifier [PID] to identify the digital program or elementary stream to which it corresponds which attributes information in an efficient and organized manner [col. 3, lines 27 – 32].

24. As to claim 23, Movshovich discloses the use of bus cycle as a clock cycle [col.9, lines 31 – 33].

25. Applicant's arguments with respect to claims 17 - 35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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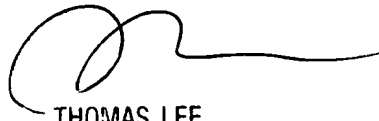
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin C. Patel whose telephone number is 703-305-3994. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nitin C. Patel



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100